ministry of

environment

New Directions for Regulating Contaminated Sites: A Discussion Paper

January 1991

BC Environment

RC
E 51.6
.S M48
1991
c.2

91-02959/

NEW DIRECTIONS FOR

REGULATING CONTAMINATED SITES:

A DISCUSSION PAPER

Ministry of Environment
Province of British Columbia

Prepared for
Environmental Protection Division
Ministry of Environment
By Waldemar Braul
Barrister & Solicitor

January 1991

TABLE OF CONTENTS

1. INTRODUCTION 1

1.1 Contaminated Sites Become An Issue 1
1.2 The Purpose of This Discussion Paper 2

2. WHAT ARE CONTAMINATED SITES? 3

2.1 Soils, Ground Water or Facilities Contaminated 3
2.2 Environmental and Health Problems of Contaminated Sites 3
2.3 How Clean Is Clean? 4

3. HOW ARE CONTAMINATED SITES MANAGED NOW? 4

3.1 Identification of Contaminated Sites 4
3.2 Assessment of Contaminated Sites 6
3.3 Triggers for Remediation of Contaminated Site 7
3.4 Actual Clean-ups of Contaminated Material 8
3.5 Notifications 9

4. LEGISLATIVE NEEDS IN BRITISH COLUMBIA 10

4.1 Purpose of New Legislation 10
4.2 Effective Procedures for Identification and Assessment of Contaminated Sites 11

4.2.1 General Duty to Provide Preliminary Assessments 11
4.2.2 Detailed Assessments 12
4.2.3 Database of Contaminated Sites 13
4.2.4 Improved Notice of Contamination 14

4.3 Liability for Clean-Up: Implementation of the "Polluter-Pay' Principle 15

4.3.1 Responsible Persons 15
4.3.2 Types of Liability -- Absolute and Strict 17
4.3.3 Retroactive Liability 18
4.3.4 Joint and Several Liability 18
4.3.5 Exemptions from Liability 20

4.3.6 Settlement Agreements 22
4.3.7 Limits on Liability 22

4.4 Powers to Ensure Remediation 22

4.4.1 Approval of Remediation Plans 22
4.4.2 Authority for Government Cleanup and Cost Recovery 23
4.4.3 Financial Guarantees 23
4.4.4 Injunctions to Prevent Development Before Cleanup 23
4.4.5 Verifications 24
4.4.6 Certifications 24

4.5 Delegation of Functions to Municipalities 25

4.6 Public Notice and Review 25

5. WHAT ABOUT PROVINCIAL CLEANUP CRITERIA? 27

6. A FINAL NOTE ON CONSULTATION 27

APPENDIX 1: SUMMARY OF RELEVANT LEGISLATION 1

1. The Waste Management Act: Permits, Orders, & Spills 1
2. Special Waste Regulation 3
3. The Environment Management Act: Environmental Emergencies and Protection 3
4. Land Title Act 4
5. Local Government Bylaws and Policies 4

APPENDIX 2: OTHER JURISDICTIONS 7

1. The U.S.Approach 7
2. Ontario's Approach 9
3. Quebec's Approach 9
4. The Netherlands' Approach 10

APPENDIX 3: REFERENCES 11

1. Books and Reports 11
2. Statutes 12

1. INTRODUCTION

1.1 Contaminated Sites Become An Issue

The past focus of pollution control legislation in British Columbia was on 'end-of-pipe' discharges. The provincial Waste Management Act, for instance, was primarily designed to regulate discharges from current activities.

The orientation to current activities has resulted in a lack of legislation addressing contamination left by historic activities. Waste disposal practices going back decades, if not the past century, have left a legacy of contaminated land, groundwater, and sediments in British Columbia. Many of these sites are now recognized as posing environmental hazards and human health risks. These hazards and risks are not adequately addressed by current legislation. For example, there is an inadequate legislative basis for identifying and assessing suspect sites, making it difficult for the Ministry of the Environment to establish rational clean-up priorities. Nor are there effective legislative or common law rules of liability to compel clean-ups. Indeed, there is widespread uncertainty over who is liable to pay for cleaning up contaminated sites. There clearly is a need for law reform.

The need for law reform was recognized in the last throne speech which stated the government's intention to introduce legislation respecting contaminated sites. The provincial government recently amended, with Bill 68, the Waste Management Act to improve the Ministry's ability to regulate contaminated sites, especially with respect to obtaining information about contamination, ordering former owners to clean up, and providing certificates of compliance. This amendment, however, represents only a first step. The Ministry is in the process of developing new legislation to deal specifically with the many unique problems associated with contaminated sites.

The province is participating in a joint federal-provincial program designed to remediate 'orphan high risk contaminated sites.' This program, created in 1989 by the Canadian Council of Ministers of the Environment, established a $250 million fund to remediate orphan high risk contaminated sites and to develop remedial

technologies over five years. To implement a key element of this program, the province and the federal government signed a cost sharing agreement on November 30, 1990. In establishing this national program the Environment ministries also agreed to endeavour to pass 'polluter-pay' contaminated site legislation by December 31, 1991.

Another parallel initiative is the Ministry's development of clean-up standards, namely the Criteria for Managing Contaminated Sites in B.C. These Criteria follow the standards adopted for the Pacific Place clean-up, and now are being refined to be generally applicable to a wide variety of contaminated sites.

1.2 The Purpose of This Discussion Paper

The Ministry recognizes that law reform dealing with contaminated sites raises complex legal issues. This discussion paper serves as a basis for consultation with parties which might be affected by law reform. The paper highlights legislative needs for dealing with contaminated sites. The paper also describes law reform solutions which are under active consideration by the Ministry. The paper highlights the main principles which would guide specific legislative provisions in order to facilitate discussion on whether the directions of reform are appropriate.

The law reform proposals set out in this discussion paper should not be seen as fixed. The consultations will serve to guide the next stage of analysis and legislative drafting.

This discussion paper relies heavily on the analysis contained in a report commissioned by the Ministry of Environment in 1989, "Contaminated Sites Management in the Province of British Columbia: A Review of Provincial Rules and Responsibilities". Readers seeking detailed analysis of current legislation should refer to that study. Appendix 3 provides a list of additional references which could be consulted.

2. WHAT ARE CONTAMINATED SITES?

2.1 Soils, Ground Water or Sediments Can Be Contaminated

Contamination of sites - soil, ground water, sediments, etc. - can occur in a wide variety of ways. Many industrial sites have been contaminated from process discharges to land or water, on-site burial of wastes, non-point chemical releases (small, frequent drips and spills), stockpiling and storage of materials, major spills, and releases during fires.

Contamination can also result from filling sites with contaminated soil from elsewhere and illegal dumping. Former landfill sites may contain a wide array of contaminants. If adequate measures are not taken to secure a landfill site, especially in areas of high rainfall, sooner or later contaminants will leach into surface and groundwaters. Landfill sites, once capped, can become very attractive for development, including residential development, but they nonetheless can remain as long-lasting sources of pollutants.

Underground storage tanks represent another major source of soil and water contamination. Many tanks, especially those installed before the mid-1970s, were constructed with little protection against corrosion and tank failure.

2.2 Environmental and Health Problems of Contaminated Sites

Contaminated sites can be "toxic" -- that is, exposure to contaminants could cause temporary or permanent adverse effects in living organisms or their offspring. Research has shown that toxic effects could arise from exposure to heavy metals such as chromium, lead and arsenic; industrial pollutants such as polycyclic aromatic hydrocarbons (PAHs) and pentachlorophenols (PCPs); and products such as polychlorinated byphenols (PCBs) and asbestos.

It should be noted, however, that considerable scientific uncertainty still exists over the toxicity of many chemicals, particularly chronic toxicity effects. Test

results are subject to highly varying interpretations. The discipline of toxicology is relatively new, and faces the challenge of keeping up with rapidly increasing use of new chemicals in industrial processes. Toxicologists face a difficult task because the health effects of contaminants, especially at the levels often found in polluted soil or water, may not appear for decades after exposure. This makes it exceedingly difficult to reach definitive conclusions about cause-and-effect relationships.

2.3 How Clean Is Clean?

There is ongoing debate over what constitutes appropriate clean-up criteria. Determining these standards involves difficult decisions regarding the level of risk to human health and the environment that is acceptable. In addition, standards affect costs of clean-up. High public expenditures on clean-ups may be at the expense of other worthwhile social programs.

To properly address these issues, the Ministry is developing the Criteria for Managing Contaminated Sites in B.C. But this is a complex task, given the considerable scientific uncertainty of the toxic effects of low levels of contamination. In spite of the uncertainty, there is a need for defensible standards in the provincial strategy for clean-up. The Ministry does not intend to view the criteria as "the final word". Further refinement is expected as toxicological information becomes available and as testing methods improve. In addition, efforts have been made under the auspices of the Canadian Council of the Ministers of Environment to develop consistent nation-wide clean-up criteria.

3. HOW ARE CONTAMINATED SITES REGULATED NOW?

3.1 Identification of Contaminated Sites

A central problem arising from the current regulatory framework is a general lack of information about the full extent or severity of contamination. There has been no specific undertaking to create an inventory, a central

registry of contaminated sites or a tracking system for contaminated materials in British Columbia. The scarcity of information is not surprising. In many cases owners are not aware of contamination and where it is known; nor is there a general legal duty on owners, occupiers, or operators to disclose to government whether their sites are contaminated.

The Ministry needs reasonably comprehensive data to set priorities and to make well-informed decisions on whether clean-ups should be ordered. Accordingly, the Ministry currently employs a variety of means of identifying contaminated sites, namely:

* voluntary disclosures by developers - prudent developers wishing to develop a potentially contaminated site recognize the need to discuss assessment and remediation with the Ministry at an early stage;

* referrals from municipalities - if, on receiving a development proposal, a municipality is of the view that there might be a contamination problem, it will normally refer the developer to the Ministry of Environment to receive direction on further assessment;

* pollution abatement orders - under section 22 of the Waste Management Act a Manager of the Ministry may order a person who had possession, charge or control of a polluting substance to provide information relating to the pollution and to undertake investigations, tests and surveys to determine the extent and effects of the pollution;

* administration of Special Waste Regulation - the Ministry becomes aware of contamination by virtue of the reporting requirements placed on operators of "special waste facilities" ("special waste" refers to particularly hazardous waste, as discussed more fully in Appendix 1);

* administration of permits and other approvals - the Ministry is able to identify some contaminated sites through its administration of Section 8 of the Waste Management Act.

under which the Ministry may approve with certain conditions (including monitoring) the introduction of waste into the environment; and

- disclosure in emergencies - the Ministry of Environment could also order persons to provide information about the extent of contamination on their lands in cases where emergencies exist (pursuant to section 5 and 6 of the Environment Management Act).

Two additional means of identification are viewed as potentially useful sources, namely:

- monitoring the movement of material not qualifying as special waste from contaminated sites - contaminated material from industrial sites can presently be relocated to other sites as "fill" without any reporting requirement;

- decommissioning of industrial facilities - there is no present duty to disclose to government (or subsequent owners) how contamination is managed when an industrial plant is decommissioned or how contamination is dealt with in the process of plant modernization or expansion.

3.2 Assessment of Contaminated Sites

Many assessments or site investigations undertaken today are carried out as part of the redevelopment process. Once a municipality refers a redevelopment proposal to the Ministry for assessment, the usual practice of the Ministry is to require the developer to conduct a phased site assessment. Normally the developer furnishes a site assessment report prepared by an environmental consulting firm. With this report, Ministry officials consult with the developer and his consultant to determine if and how a clean-up should be carried out.

The Ministry's assessment is guided by two important reference documents:

- Criteria for Managing Contaminated Sites in B.C. (Draft) - administrative guidelines with maximum contaminant concentration standards of 'cleanliness' which address human health and environmental considerations and a quantitative risk assessment/risk management approach which considers on-site management of contamination; and

- Special Waste Regulation - passed pursuant to the Waste Management Act, it sets out numerous requirements for handling, storing and disposing of "special waste" and for siting and operating "special waste facilities". (The Criteria and the Regulation are discussed in more detail in the Appendix 1.)

Bill 68's amendment to the Waste Management Act now provides a broader legislative basis for requiring remediation including site assessments. As noted above in Part 3.1, section 22 of the Waste Management Act enables the Ministry to order named persons to provide information relating to pollution. No regulations or administrative guidelines have been developed specifying the format or content of assessments.

3.3 Triggers for Remediation of Contaminated Site

For economic reasons, the sites which tend to be remediated are those which are intended for redevelopment purposes. Developers recognize that local governments have discretionary authority to withhold approval for rezoning, and could reject a proposal on environmental grounds. Consequently developers consider remediation as an important aspect of development. In any event, developers generally will want to clean up their contaminated sites to avoid future liability under the common law.

Another important trigger for remediation arises via section 22 of the Waste Management Act. Section 22 enables a Manager of the Ministry of Environment to order a person who had possession of a polluting

substance, or a current or past owner, to carry out investigations of contamination and remediation in accordance with any criteria established by the Ministry's Director. Section 22 provides broad authority for assigning the costs of clean-up to persons who originally caused the problem.

While section 22 provides the Ministry with considerable flexibility, its wide scope means that predicting if and when a party could become liable is a very uncertain matter. No guidance is given on which principles of liability apply. Retroactivity is clearly intended and persons named in an order are intended to be fully liable. As concerns over contaminated sites mount, parties will increasingly recognize that planning for potential liability under section 22 is a very difficult, if not impossible, matter.

3.4 Actual Clean-ups of Contaminated Material

The actual clean-up of a contaminated site is subject to a number of treatment and handling requirements. If the site contains "special waste" then the requirements contained in the Special Waste Regulation will apply. If the site contains other (generic) waste or contaminants at lower concentrations, then the clean-up could be compelled by an order under section 22 of the Waste Management Act. Finally, the terms of waste disposal approval (usually a permit) issued under section 8 of the Waste Management Act could also govern clean-ups, although in practice section 22 would normally be used for this purpose.

As a result of Bill 68, the Waste Management Act now enables a Manager of the Ministry to issue a "certificate of compliance (s. 20.2). This provision, however, awaits the passage of regulations specifying the procedures and conditions under which certificates are issued.

Hazardous waste management is a problem for parties cleaning up contaminated sites, since British Columbia has no central treatment facility for hazardous wastes and shipment to other jurisdictions for disposal is expensive. Accordingly, in many cases waste which has been extracted from a site must be stored. Storage facilities for special waste require authorization pursuant to section 3.2 and section 4 of the Waste Management Act

and must meet the operational and performance requirements set out in Division 2, Part 4, of the Special Waste Regulation.

It should be noted that legislation generally is silent on government authority to enforce clean-ups. For example, except under emergencies, the government lacks the power to undertake remedial measures at the expense of a property owner. While entry onto private property and unilateral clean-up of that property by government should not be arbitrary, the Ministry is of the view that in certain instances, the public interest would be served to do so (as discussed in 4.4.2 below).

Legislative authority to request that proponents 'verify' that clean-ups have been carried out according to a predetermined clean-up plan has not been provided in the context of contaminated site provisions though it could form part of the requirements of site specific order provisions.

3.5 Notifications

In B.C. there are presently two statutory provisions allowing for notification of potential problems due to contamination of land. Section 320.1 of the Land Title Act enables a Director of the Ministry of Environment to file a notice of land contamination on the title to that land where the site contains "special waste" and where there is a danger to human health.

The second notification provision is s. 215(1) of the Land Title Act which provides for the registration of a covenant restricting the use or development of land. Unlike section 320.1, which is a simple notification, section 215(1) of the Land Title Act is regulatory in nature, as it can restrict land use.

A parallel use of the Ministry of Crown Lands' "Crown Land Registry System" for non-titled properties should also be considered as public notification.

4. LEGISLATIVE NEEDS IN BRITISH COLUMBIA

4.1 Purpose of New Legislation

At present, the main factors governing assessment and remediation of contaminated sites are the common law, judicial application of certain statutory provisions (notably order powers), and market forces. The Ministry's experience is that the common law, current legislation and the market place have significant limitations to achieving cost effective and appropriate remediation. What is missing is legislation designed to deal with contaminated sites in a direct and systematic manner. The following elements of the regulatory framework need improvement:

- identification and assessment - there is a need to establish a legislative basis for an effective system of identifying and assessing contaminated sites;
- liability for clean-up - effective regulation requires clear rules assigning liability for remediation of contaminated sites on the basis of the 'polluter pay' principle;
- enforcement - the Ministry requires appropriate measures to ensure that remediation is carried out in a timely and technically appropriate manner;
- public review - legislation needs to spell out what provisions will be made for public review of remediation of major contaminated sites; and
- delegation to municipalities - legislation should provide the option to delegate functions to municipalities where appropriate.

The following sections consider each of these needs in turn.

4.2 Effective Procedures for Identification and Assessment of Contaminated Sites

4.2.1 General Duty to Provide Preliminary Assessments

Part 3.1 above described the constraints facing the Ministry when it attempts to identify the full range of possible site contamination. Section 22 of the Waste Management Act already enables a Manager of the Ministry to obtain information pertaining to pollution, but could be improved by clarifying the duties on persons to provide preliminary and detailed assessments. To overcome this deficiency, the Ministry is of the view that legislation needs to clarify the duty to report where contamination problems might be evident or identifiable.

While this duty needs to be broad and extensive, it should not be one which requires detailed assessments in all instances. Rather, there is a need for information which is in the nature of 'preliminary assessments'. Preliminary assessments of the extent of contamination on a site would suffice to inform the Ministry whether more detailed assessment is required.

Legislation needs to specify those instances where a responsible person must furnish a preliminary assessment. For instance, a duty to provide the Ministry with a preliminary assessment could be triggered by the following events:

- development/redevelopment applications;
- applications for municipal permits to remove/deposit soil to/from a site;
- decommissioning of industrial/commercial facilities;
- rehabilitation/redevelopment of industrial and commercial facilities;
- waste permit applications and waste permit amendment applications for discharges to land or storage of special waste; and
- "discovery" of a contamination problem by provincial and municipal authorities by any other means.

"Discovery" by government officials may occur, for example, in the context of spill reports, former employee reports, public calls, and review of old waste management files.

The Ministry is considering whether some of these triggers should be automatic, whereas others would be discretionary, in which case a Ministry official would have the authority to require a preliminary assessment.

The Ministry is also evaluating the merits of the approach used in many U.S. states where all persons have a duty to report information respecting hazardous materials on their property. This information can then be used to assess likelihood of contamination.

The Ministry is of the view that legislation would set out, in fairly general terms, the duty to provide preliminary assessments and regulations would specify the format, content, and timing requirements of the preliminary assessments.

Other jurisdictions -- notably the United States and Ontario -- have in recent years recognized the need to improve the government's information base, and to achieve this have imposed sweeping duties of disclosure on parties such as owners and operators of sites which might be contaminated. (See Appendix 2 for summary of these jurisdictions' approaches.) In some U.S. states, vendors have a duty to provide detailed disclosures relative to contamination, prior to the sale of property. The Ministry is considering the need for requiring disclosure of information about contamination prior to the sale of certain classes of property.

4.2.2 Detailed Assessments

Ministry officials would, on the basis of a preliminary assessment, be in a position to determine if a contamination problem warrants further assessment of site conditions, human health, and environmental impacts. Legislation is required to clarify how the Ministry would request detailed assessments. Regulations should set out criteria for determining whether a detailed assessment is warranted (including reference to clean-up standards) and provide, where a

detailed assessment is not warranted, a letter of "non-applicability" to persons who are concerned whether such an assessment might be required.

Preliminary assessments as well as Ministry decisions respecting whether detailed assessments are necessary would be registered in the Ministry's site information data base (as discussed below in 4.2.3).

4.2.3 Database of Contaminated Sites

There is a need to establish a sites information database to support the identification and assessment process. Such a database would be especially beneficial if it lists sites considered or assessed for contamination, describes the types and locations of known information about the site (including aerial photos, well logs, assessment reports, etc.), contains a record of site status for all sites referred to the Ministry for assessment, and sets out Ministry decisions on whether detailed assessments are required.

Information on this database should be available to the public, subject to government policy respecting the handling of proprietary information and limitations on the liability of government in relation to developing, maintaining and providing access to such a database.

The provision of a legislatively-based database would help to resolve the growing concern that the government and its officials are subject to a high degree of liability arising from their disclosure, or non-disclosure, of information pertaining to contaminated sites. Agencies often have, or are perceived to have, a good deal of information which might influence the decision of a requesting member of the public (e.g., a prospective purchaser of real estate). Government agency officials will increasingly be pressed for information, and will be uncertain as to the extent of the duty to collate information from their files. Legislation does not set limits on the extent of the duty to disclose information in the possession of government agencies and potential liability.

The difficulty facing government officials is illustrated in a recent B.C. Supreme Court decision which found the

municipality of Delta liable because one of its officials failed to disclose a relevant report on soil conditions to an enquiring member of the public (even though the report was not prepared for public distribution; in fact its existence was not known to the official). That is, the court found that the government agency owed a common law duty of care to the inquiring person, though it left question as to the precise nature of the duty.

4.2.4 Improved Notice of Contamination

As noted in Part 3.5 above, section 320.1 of the Land Title Act enables the Waste Management Director to file a notice of contamination of land where there exists "special waste" and a danger to health. Legislation presently does not provide a means for informing and publicizing other information pertaining to the environmental quality of a particular site, for example where contamination is causing an adverse effect on groundwater quality. The Ministry is considering whether the public interest would be served by establishing a geographically-based notification system which is capable of showing key aspects of contamination (potential health and environmental problems). Such a system would be particularly beneficial to purchasers who ordinarily would have no reason for suspecting that a contamination problem exists. There is also a need to record, for public notice, the extent of contamination which remains after a site has been cleaned up in accordance with Ministry criteria. (Such notification, for example, would show that risk assessment has been used but that contaminants may still be on the site.)

The Ministry wishes to evaluate the appropriateness of the Land Title Office as the vehicle for public notification of contamination. The main goal of the title system is to provide certainty in regard to the respective rights of owners. It might be appropriate to place notices of orders on title, but it may be another matter altogether to place other 'raw' information about contamination on title. The feasibility of attaching such information on title and the implications of such annotation require further evaluation. The challenge for law reform is to balance the need for certainty and the need to warn the public about potential hazards.

4.3 Liability for Clean-Up: Implementation of the 'Polluter-Pay' Principle

4.3.1 Responsible Persons

The Ministry considers that liability for the clean-up of contaminated sites should be governed by the principle of 'polluter pay'. While this principle is logical and supportable, it is a complex task to define "polluters' for the purpose of assigning liability. An inappropriate definition of polluters, of course, means that taxpayers will have to pay a greater share of clean-up costs.

'Polluters' should include not only those persons who actually operated a site and discharged hazardous contaminants as part of the operations, but also those persons who contributed, directly or indirectly, to pollution on a given site. Jurisdictions which have passed contaminated site legislation use very broad definitions of polluters, or 'responsible persons'. For example, U.S. federal legislation the (Comprehensive, Environmental Response, Compensation and Liability Act, or CERCLA) specifies four classes of responsible persons:

* current owners of contaminated sites;
* past owners or operators who owned or operated the site at the time that the hazardous substance was deposited on the site;
* generators of waste who arranged to deposit the waste on the contaminated site; and
* transporters who accepted hazardous substances for transport to facilities they selected and from which there was subsequently a release or threatened release.

Many U.S. states have passed legislation similar to CERCLA (to regulate those sites which are not covered by CERCLA). Most adopt the above categories but others such as Oregon have expanded the list of responsible persons to include:

* owners or operators who know of a release and subsequently transferred the facility to another person without disclosing such knowledge; and

- persons who unlawfully hinder or delay entry to, investigation of or removal or remediation action at a facility.

Several U.S. states do not define classes of 'responsible persons' but provide a general description of activities which may attract liability. Nevada's CERCLA-type legislation, for example, provides that a "person who possessed or had in his care any hazardous material involved in a spill or accident requiring the cleaning and decontamination of the affected area is responsible for that cleaning and decontamination."

The Ministry considers that Section 22 of the Waste Management Act - giving a manager wide discretion to order investigations, remediations, etc. - could benefit from clarification respecting which persons could be held responsible for clean-up costs. The legislative assignment of 'responsible persons' imports a degree of certainty and would improve the current situation where there is possibility, but no certainty, that a wide variety of parties will be held liable for the cost of clean-up. The Ministry is evaluating the merits of designating four classes of responsible persons which are most commonly specified in U.S. legislation (operators, owners, generators, and transporters). (For further details of the U.S. approach, see Appendix 2.)

'Responsible persons' would be seen as candidates for liability for clean-ups. A designated Ministry official (e.g. a Manager) would have the discretion to determine which sites should be remediated, and which responsible parties should contribute to the clean-up. That is, actual liability would only be crystallized by the exercise of an order under the Waste Management Act, meaning that not all responsible persons would necessarily be liable in all instances. An appeal process, as is provided under the Waste Management Act now, would apply.

Under the terms of the National Contaminated Sites Remediation Program designed to deal with orphan sites, such sites would be deemed not to have identifiable responsible persons, or responsible persons exist but are unwilling or unable to contribute to clean-up. Such persons would be subject to responsibilities under the liability provisions under proposed amendments to the

Waste Management Act (attempts at recovery of costs by government are required).

In addition, as discussed below, there would be a number of defences or exemptions from liability.

4.3.2 Types of Liability -- Absolute and Strict

As a general rule, responsible persons would be held liable according to the rule of absolute liability. There would be no provision for 'due diligence' defences such as acting according to accepted practices of the day, or that the pollution occurred in the absence of pollution controls. The Ministry notes that many other jurisdictions have adopted absolute liability as a means of achieving the clean-up of contaminated land. Almost all U.S. state and federal contaminated site legislation either expressly imposes absolute liability, or has been interpreted to impose absolute liability. U.S. state and federal legislators apparently have recognized that the defence of due diligence would often prevail under the common law or under legislation providing for this defence, and thus significantly limit the contribution by polluting persons to the costs of cleaning up contaminated sites. The European Community has also prepared an absolute liability regulatory framework which its members are expected to implement. Ontario in 1985 introduced absolute liability as a means of ensuring that polluters pay for the costs of cleaning up spills. (See Appendix 2 for further details of the U.S. and Ontario approaches.)

The Ministry considers that absolute liability would not be appropriate for owners. Owners could be held strictly liable, a less onerous type of liability. Strict liability means that past and current owners can obtain relief from liability where they did not know of the existence of the contamination and exercised all due diligence in the maintenance of the site, including preventing the release of hazardous substances. But liability would be attributed to owners who, for example, did not exercise due diligence in ascertaining contamination before purchase or in preventing release of a hazardous substance, or vendors who unfairly transferred their responsibility. At the same time, buyers who purchase without inquiring into the possibility of contamination and have not

investigated the site in a reasonable manner should not be protected.

4.3.3 Retroactive Liability

The Ministry recognizes that, in order to implement the 'polluter-pay' principle, responsible persons should be held liable retroactively. Retroactive liability implies that the costs of remediation could be imposed on a party which, at the time of polluting, may have been in full compliance with the law.

Parties facing retroactive liability could argue, with some justification, that under this form of liability, there may be limited opportunities to externalize (or pass on) the costs of the additional remediation requirements. For instance, if these responsible persons no longer own the site, revenues from operations cannot be recovered.

There are, however, other considerations favouring the imposition of retroactive liability. For one, there is a clear need for retroactive liability -- a good deal of contamination in British Columbia has predated the introduction of pollution prohibitions. Without retroactive liability, the Ministry would be handicapped in its ability to obtain clean-up contributions for the many sites which were contaminated before the introduction of pollution controls in the 1960s and 1970s. The adoption of retroactive liability reflects a policy choice to hold past polluters, as opposed to current taxpayers, liable as much as reasonably possible. Finally, it should be noted that the harsh effects of retroactive liability could be mitigated by express exemptions from liability (set out below in 4.3.5).

4.3.4 Joint and Several Liability

The issue of joint and several liability arises where there was more than one responsible person with respect to a contaminated site. Joint and several liability means that a responsible person must pay the entire cost if other responsible persons cannot be found or lack funds to pay their share.

The issue of joint and several liability is a complex one. The Ministry recognizes that the imposition of joint and several liability could be potentially unfair - a relatively minor contributor to a site's contamination could be ordered to pay for the entire clean-up. The Ministry, however, is of the view that adequate safeguards could mitigate the potential harsh effects of joint and several liability. Indeed, joint and several liability is an unavoidable and necessary aspect of the 'polluter pay' principle. For many sites, it becomes technically very difficult, if not impossible, to determine the relative contributions of various responsible persons to a particular contamination problem. Moreover, in many sites, the contribution to the contamination by even one of many polluters would necessitate the same degree of clean-up.

The Ministry notes that the harshness implied by joint and several liability could be mitigated in appropriate cases. For one, legislation could provide 'apportionment' guidelines to Ministry officials. In addition, the Ministry is considering the possibility of providing a legislative option of mediation for determining the distribution of liability between responsible parties. Mediation has the potential to resolve the issues of relative liability more quickly and less expensively than proceeding through the courts but would require consent of all the responsible parties.

Certain U.S. states, for example, provide that liability will be apportioned if there is a reason for doing so, and if not, liability will be joint and several. Some states direct their officials to consider factors such as:

* the ability of the parties to demonstrate that their contribution to a discharge, release, or disposal of a hazardous material can be distinguished;

* the amount of hazardous material involved;

* the degree of toxicity of the hazardous material involved;

* the degree of involvement by the parties in the generation, transportation, treatment, storage, or disposal of the hazardous waste;

- the degree of care exercised by the parties with respect to the hazardous material concerned, taking into account the characteristics of such hazardous material; and

- the degree of cooperation by the parties with federal, state, or local officials to prevent any harm to the public health or the environment.

Joint and several liability could also be reduced where the government exercises a discretionary power to indemnify those parties which, as a result of an order, would suffer a patent unfairness. This power could alleviate the liability of those parties who are likely to suffer financial losses or damage which they cannot reasonably be expected to bear either wholly or in part, and where indemnification has not or cannot be provided by any other means.

4.3.5 Exemptions from Liability

The harsh effects of absolute, retroactive, and joint and several liability could be mitigated by providing for exemptions from liability. Other jurisdictions, for example, have given exemptions from liability where:

- a state or local government acquires ownership or control of a property through bankruptcy, tax delinquency, abandonment, or other circumstances in which the government involuntarily acquires title (CERCLA);

- a person holds legal instruments primarily to protect his security interest in the facility (CERCLA);

- the application of pesticides has been carried out pursuant to relevant statutes (CERCLA);

- releases have been made pursuant to permits issued under relevant law (CERCLA);

- contamination was caused solely by an act of war (CERCLA);

- contamination was caused solely by an act or omission of a third party other than an employee or agent of the defendant, or one whose act or omission occurs in connection with a contractual relationship, existing directly or indirectly with the defendant (CERCLA);

- a mortgagee acquires title by foreclosure (Maryland);

- a mortgagee acquires title by foreclosure, but liability is capped at the value of the real estate (Connecticut);

- an owner purchases a site containing a controlled hazardous substance without knowledge of such substance on the site (Maryland);

- an owner occupies or has occupied a single family residential property of 5 acres or less, unless the state proves that the hazardous substance release occurred after the owner occupied the property or the owner knew about the release prior to purchase (California); and

- the state fails to prove a causal relationship between the health or safety threat of a site and the acts or omissions of the responsible person (Maine).

Some states such as Massachusetts provide that exemptions apply only to the clean-up costs exceeding the value of the real property.

The Ministry is in the process of examining the experience of these U.S. exemptions to determine their appropriateness in a B.C. context.

Further consideration must also be given to whether legislative liability, if any, could or should be imposed on other parties such as receivers-managers, trustee in bankruptcy, directors of companies, and professional

advisors (e.g. realtors, environmental consultants, lawyers).

4.3.6 Settlement Agreements

The Ministry recognizes the need to establish a means for the expeditious settlement of liability claims. For instance, where a responsible person wishes to settle with the government at an early stage, this person should be afforded the opportunity to do so. Settlement agreements are particularly important where there is more than one responsible person, and some are engaged in lengthy litigation and further negotiation with other responsible persons. For instance, certain persons might dispute whether they fall within a category of "responsible persons" and litigation over this matter could become time-consuming; responsible persons who are willing to settle at an early stage should not be required to incur those lengthy delays.

It is expected that settlement agreements will be used mostly with parties, whose relatively minor share of clean-up is fairly evident.

4.3.7 Limits on Liability

There is a need for legislation to set upper limits on liability of government agencies or officials, including any municipalities or agencies to which responsibility is delegated in relation to authorizations for site remediation or further development.

4.4 Powers to Ensure Remediation

4.4.1 Approval of Remediation Plans

Legislation should provide authority for officials to approve remediation plans subject to any changes and requirements that the officials consider necessary, including posting of financial guarantees that the work will be completed satisfactorily. Regulations might be required to set out guidelines for remediation plans and factors to consider in evaluating requirements for financial guarantees.

4.4.2 Authority for Government Clean-up and Cost Recovery

At the moment, the Ministry has the legislative authority to use government funds to clean up the land in emergencies and later recover costs from the persons who caused the emergency (pursuant to section 6 of the Environment Management Act). This provision certainly gives the provincial government the necessary flexibility to respond quickly to emergencies.

There appears to be some question as to whether the provincial government should have the legislative authority to enter and clean up private lands, and recover clean-up costs, in situations amounting to less than emergencies. For example, there may be situations where the responsible party defaults on a clean-up order, yet the problems associated with that site do not amount to an "emergency". It should be noted that Ontario, in June of 1990, passed legislation which would, among other things, provide access to private property to clean up and to enable the government to recover costs (regardless of whether an emergency exists). At least one legal opinion has suggested that various provisions of Ontario's new legislation may infringe on the Canadian Charter of Rights and Freedoms. Needless to say, the Ministry needs to carefully review if and how the provincial government should have the power to enter and remediate private land.

4.4.3 Financial Guarantees

Where there is uncertainty about the success of the remediation, that is the measures taken are of an interim nature, the Ministry should have the option of requiring a bond or clean-up fund contributions to ensure proper closure, decommissioning, or final remediation of the site (e.g. a landfill site).

4.4.4 Injunctions to Prevent Development Before Clean-up

There is a need for legislation empowering the government to obtain an injunction against a person who fails to carry out the necessary investigations or to obtain

the necessary approvals for remediation prior to developing a property which may be contaminated. The person would also be subject to substantial penalties for failing to secure the necessary approvals prior to development.

4.4.5 Verifications

There is a need to implement legislation providing designated officials with authority to request a report from responsible persons (e.g., developer, owner) that remediation has been carried out properly and according to an approved plan (as discussed in 4.4.1 above). This report would demonstrate compliance with clean-up criteria. The report would be reviewed and approved by the Ministry and other agencies involved in the regulatory process for that particular site.

4.4.6 Certifications

A recent amendment to the Waste Management Act (s. 20.2) provides the Ministry with authority to issue certificates of compliance with existing provincial requirements. Property owners and local governments often request the Ministry of Environment to certify lands as being environmentally safe or suitable for specific purposes. Regulations (pursuant to section 35(2)) are needed to define criteria and procedures for issuing certificates of compliance.

These regulations, for example, could clarify that certification could include conditions attaching to the final approval of clean-up work on the site. Where on-going monitoring of the site will be required, the certificate could indicate the party responsible for the on-going activity and stipulate the required monitoring program and reporting arrangements.

Future legislation or regulations could also provide the authority to make the certification conditional on posting financial security or on-going monitoring to ensure the long term care and maintenance of the site. Where the site meets current standards by virtue of use of risk assessment/risk management, but where contaminants

remain on site, this might be recognized in the certificate.

4.5 Delegation of Functions to Municipalities

The province should take the lead role in managing contaminated sites. This reflects the primary jurisdiction of the province in these matters. However, in light of the important role that municipalities play in the controlled development of land, legislation should be sufficiently flexible to permit delegation of certain aspects of the process to a municipality where this arrangement is mutually acceptable. Delegation to municipal officials and private sector technical specialists also warrants attention. In many cases this will be desirable since such an arrangement will permit the municipality to coordinate the various reviews and approvals for local lands, thus ensuring that the entire process is handled efficiently.

The functions that could be delegated to a municipality include:

* approval of remediation plans;
* review and approval of assessments;
* determination of the extent of public involvement;
* requirement of financial assurances for the due performance of the remediation process; and
* certification of the remediated site.

Delegation of regulatory responsibility to municipalities would have to take into account factors such as:

* technical capabilities of municipal staff;
* indemnification against liability of municipal officials; and
* the types of projects and sites, including whether they pose unique, specialized assessment and remediation.

4.6 Public Notice and Review

The Ministry recognizes the need to define what provisions will exist for public input on proposals to

remediate (or not to remediate) major contaminated sites. Any system of review needs to be flexible, as health and environmental issues could vary greatly from site to site. There may be very little public concern over and need for review of a routine clean-up of a gas station's leaking tank, but greater concern about extensive contamination at a former industrial area slated for residential development. An initial question may be whether provisions for a public inquiry, called at the discretion of the Minister of Environment, as provided in section 7 of the Environment Management Act are adequate.

Other jurisdictions recognize that the format of and needs for review may vary greatly from site to site, and have introduced a flexible process of review. In the U.S., state and federal legislation typically requires that a site owner develop, subject to government approval, a public communications strategy which reflects how particular needs will be reviewed by the public. Public communications strategies for complex situations might require the establishment of a public liaison committee, the conducting of public meetings and/or opportunities for the public to review and comment on the assessment and remediation process and decisions. The goals of the U.S. legislation, it seems, are to ensure that the public is accurately informed about the assessment and clean-up process, that the public is given a meaningful opportunity to review and comment on the specific components of the process, and that the format of review is tailored to the particular requirements of a contaminated site.

An important element of public input legislation concerns notification. From the point of view of managing future risks to public health and the environment, and in light of some of the uncertainties about these risks, legislation might include a formal legal requirement for public notification about key steps in the process. The owner might also be required to maintain, and make accessible to interested parties, a copy of key elements of the public file. Such requirements would apply to major contaminated sites and would be like those now imposed with respect to waste management permit or approval applications, as specified in the Waste Management Regulation.

5. WHAT ABOUT PROVINCIAL CLEAN-UP CRITERIA?

The question arises over whether clean-up standards (e.g., in the form of the Criteria) should be incorporated in regulations or be left simply as administrative guidelines. From the point of view of property owners and professional consultants, there may be a number of advantages to having these criteria clearly and unambiguously stated in the form of a regulation pursuant to the Waste Management Act. An important advantage for these parties is the possibility that liability could be limited on the basis that they carry out clean-ups according to the required standard.

On the other hand, clean-up standards which are based in regulation may lack flexibility. Given the potentially complex nature of large site assessments, it may be desirable to have procedural requirements (including analytical protocols) set out in regulations, but with technical criteria or standards set out in guidelines and incorporated into the site assessment and remediation on the site-specific basis, and reflected in the terms and conditions attached to required permits and approvals. That is, the Ministry would retain flexibility to determine an appropriate clean-up standard for a specific site without being constrained by a general standard prescribed in the regulation which may not be appropriate in that particular instance.

6. A FINAL NOTE ON CONSULTATION

The Ministry of Environment intends to seek various meetings and opportunities for discussion of planned legislation will be provided. In addition, written submissions are welcome.

The input and responses to the discussion paper will be the basis for further drafting of legislation and regulations. The Ministry suggests that it would be particularly helpful while preparing submissions or responses to the paper, to keep the following points in mind:

- Responses should be provided to the Ministry as soon as possible. The Ministry faces certain legislative deadlines and it is the intent of the

Ministry to conclude this consultation period by March 29, 1991.

* It would be useful if respondents indicated which issues or law reform directions are of most concern or importance to them.

* It is particularly useful to obtain responses which are specific - that is, reference made to certain specific provisions policies, and situations. Examples and illustrations of problems or solutions are helpful.

Responses to this discussion paper should be sent to:

Dr. J.H. Wiens
Head, Contaminated Sites Unit
Ministry of Environment
810 Blanshard Street
Victoria, B.C. V8V 1X5

The Ministry anticipates that further consultation will be undertaken as Regulations are drafted. Draft legislation will be reviewed in the normal legislative review processes, but Regulations will in all likelihood be distributed in draft form.

APPENDIX I: SUMMARY OF RELEVANT LEGISLATION

1. The Waste Management Act: Permits, Orders, & Spills

The Waste Management Act currently provides the primary authority to deal with contaminated sites in the province. The Act imposes specific requirements on the management of "special wastes". Section 3.1 states that special wastes are to be confined according to the Special Waste Regulation.[1] Section 3.2 of the Act requires that facilities for handling special waste obtain approval.[2] Sections 4 and 5 provide the authority to regulate the transportation, storage and disposal of special waste.

Where the waste cannot be classified as a "special waste", the Ministry can rely on sections 3 and 8 of the Waste Management Act to support provincial requirements regarding remediation of contaminated sites. The Act defines "waste" very broadly, thus providing the legislative authority to deal with all discharges of waste to the environment.[3]

Under section 3 of the Waste Management Act, the introduction of waste into the environment requires a permit, approval, order or waste management plan. Section 8 of the Act provides for the issuance of a permit to introduce waste into the environment or to store special waste. In many instances, structural and operational conditions are attached to the permit.

---

1 Every person who produces, stores, transports, handles, treats, deals with, processes or owns a special waste must keep the special waste confined in accordance with the regulations.

2 The construction, establishment, alteration, enlargement, extension, use or operation of any facility for treatment, recycling, storage, disposal or destruction of special waste requires a permit, approval, order, or waste management plan.

3 "Waste" includes air contaminants, litter, effluent, refuse, biomedical special wastes and any other substance designated by the Lieutenant Governor in Council whether or not the waste has any commercial value or is capable of being used for a useful purpose.
The introduction of waste is defined to mean "depositing the waste on or in or allowing or causing the waste to flow or seep on or into any land or water or allowing or causing the waste to be emitted into the air". Where "special waste" is released from the required confinement, it is deemed to have been introduced into the environment unless authorized by a permit, approval, order, waste management plan or the regulations.

In addition, the permit may be conditional on the permittee giving security in the amount and form and subject to the conditions that the manager issuing the permit specifies. Through this permitting process, some discharges will be prohibited entirely and some will be allowed at regulated levels.

When waste or pollution escapes or threatens to escape into the environment without a permit or in non-compliance with a permit, the Act provides a scheme of offences, penalties and Ministry orders.

The Ministry relies on two sections of the Waste Management Act to enforce remediation of contaminated sites. Section 10(2) of the Act authorizes the Minister, where he considers it "reasonable and necessary to lessen the risk of an escape or spill", to order a person who has "possession, charge or control" of a polluting substance to "construct, alter or acquire at the person's expense any works, or carry out at the person's expense any measures that the Minister considers reasonable and necessary to prevent or abate an escape or spill of the substance."[4]

Section 22 provides the second important order power. Where the contaminated site is actually "causing pollution", a manager may under section 22 of the Act "...order the person who had possession charge or control of the substance at the time it escaped or was emitted, spilled, dumped, discharged, abandoned or introduced into the environment...", or any other person who caused or authorized the pollution, to abate the pollution.[5]

The scope of S. 22 was recently increased by Bill 68 which now also enables a manager to order abatement by the person who owns or occupies the land on which the substance is located or on which the substance was located immediately before it escaped or was emitted, spilled, dumped, discharged, abandoned or introduced into the environment.

---

4 A "polluting substance" is defined to mean "...any substance, whether gaseous, liquid or solid, that could, in the opinion of the Minister, substantially impair the usefulness of land, water or air if it were to escape into the air, or were spilled on or were to escape onto any land or into any body of water."

5 Section 1 of the Act defines "pollution" to mean; "...the presence in the environment of substances or contaminants that substantially alter or impair the usefulness of the environment;" the term "environment" is defined to include air, land and water.

In addition to abating pollution, the manager may also (pursuant to Bill 68, which was put into legal force in September, 1990) order the affected person to carry out remediation in accordance with any criteria established by the director and any additional requirements specified by the manager.

2. Special Waste Regulation

The Special Waste Regulation, B.C.Reg. 63/88, introduced in 1988, contains the principal siting, performance and operating standards for special waste facilities as well as defining the administrative requirements for transporting, storing and disposing of special waste.[6] Amendments are contemplated shortly.

3. The Environment Management Act: Environmental Emergencies and Protection

The Environment Management Act, SBC 1981, c. 14 allows the province to deal with environmental emergencies, and thus serves as a basis of authority for the provincial management of contaminated sites. The following provisions are now available to the provincial government:

* Section 5 - if the Minister of the Environment considers that an environmental emergency[7] exists and immediate action is necessary to prevent, lessen or control any hazard that the emergency presents, he may declare an environmental emergency and order any person to provide labour, services, material, equipment or facilities or to allow the use of land for the purpose of preventing, lessening or controlling the hazard presented by the emergency.

* Section 6 - the Minister of the environment may certify that money is required for immediate response to an environmental

---

6 "Special waste" is defined in the Regulation to include dangerous goods that are no longer used for their original purpose and that are recyclable or intended for treatment or disposal, waste oil, waste asbestos, waste pest control product containers and wastes containing pest control products, and leachable wastes."

7 The Act defines "environmental emergency" in section 1(1) to mean an occurrence or natural disaster that affects the environment and includes a flood, a landslide, and "...a spill or leakage of oil or of a poisonous or dangerous substance."

emergency. This money may be paid out of the consolidated revenue fund, and is a "...debt due to the government recoverable...from the person whose act or neglect caused or who authorized the events that caused the environmental emergency in proportions the court determines" pursuant to section 6(3).

* Section 4 - the Minister may declare in writing that an existing or proposed work, or undertaking, or product use or resource use has or potentially has a detrimental environment impact. Having made such a declaration the Minister may then make an interim environmental protection order restricting, modifying or prohibiting operation of the work or undertaking, or the use of the product or resource. These interim orders may require the person affected to do anything specified in the order for a period not exceeding 15 days; the Lieutenant Governor in Council may also make such an order either permanently or for a specified period.

4. Land Title Act

Under Section 215 of the Land Title Act, the provincial or local government may require the owner or developer to register, on the title to the land, a covenant restricting uses of the land. A section 215 covenant, for example, has been used on several occasions by the provincial government to prevent the use of land known to be contaminated at James Island and Big Bend.

Section 320.1 of the Land Title Act provides that the Director of the Waste Management Branch may file on the title of contaminated property, a notice specifying the nature of the contamination and the estimated period of contamination.

5. Local Government Bylaws and Policies

The Municipal Act and the Vancouver Charter enable municipalities in British Columbia to adopt a wide range of bylaws and policies which could affect the rights and duties of owners of contaminated land. Some of the important provisions of the Municipal Act include:

* Section 932 gives local governments the power to pass bylaws to prevent, abate and prohibit nuisances, and to provide for the recovery of the costs of abatement of nuisances from the person

causing the nuisance or other persons described in the bylaw;

* Section 936 gives the municipal council the authority to declare a 'nuisance' and order that it be removed or otherwise dealt with by its owner, and, if the owner fails to do so, the council may take steps to abate the nuisance on its own initiative;[8]

* Section 734 - provides that the municipality may "for the health, safety and protection of persons and property", and subject to the Health Act, regulate all aspects of the construction, alteration, repair or demolition of buildings and structures, including imposing a requirement to hold a building permit before commencing construction;

* Section 734(2) provides that where the construction is on land subject to flooding or some other natural disaster, a building inspector may require the owner of land to provide him with a report "that the land may be used safely for the use intended."

* Section 692 - gives local governments the general authority to regulate persons, their premises and their activities 'to further the care, protection, promotion and preservation of the health of the inhabitants of the municipality', and to require a person remedy or remove the unsanitary conditions for which he is responsible or which exist on property owned, occupied or controlled by him. All regulations made by or contained in these bylaws are not valid until approved by the Minister of Health.

The Municipal Act and the Vancouver Charter also authorize local government officials to exercise delegated powers respecting the approval of subdivision plans. Section 83 et seq. of the provincial Land Titles Act, R.S.B.C. 1979, c. 219 provide for subdivision plan approval by an "approving officer". This approval power has been delegated to local governments; the approving officer is a designated municipal official.
Section 85(3) of the Land Title Act provides that the approving officer may refuse to approve the subdivision plan if he considers that the deposit of the plan is against the 'public interest'. In particular, section 86 (1)(c)(vi) gives the approving officer the discretion to refuse to approve the subdivision plan if after due consideration of "all available environmental impact and planning

---

[8] While these provisions are similar to those contained in the provincial Health Act, the power to abate nuisances contained in the Municipal Act is not restricted to nuisances which endanger public health.

studies", the approving officer considers that the "anticipated development of the subdivision would adversely affect the natural environment to an unacceptable level".

Finally, it should be noted that the City of Vancouver has reviewed the difficulties of regulating contaminated sites from a municipal perspective and adopted a number of interim policies. For example these policies deal with how staff will review sites which might be contaminated.

APPENDIX 2: OTHER JURISDICTIONS

1. The U.S. Approach

The Love Canal problem in New York precipitated aggressive new legislation,in 1980, to identify and clean up contaminated land. The U.S. Congress took the first step when it adopted the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA),or Superfund) in 1980. CERCLA provided the federal government with the mandate to remove or clean-up abandoned and inactive hazardous waste sites and to provide federal assistance in toxic emergencies.

Liability under CERCLA is triggered by a release or threatened release of a hazardous substance into the environment which causes the government to incur expenses or "response costs" cleaning up the site. The law imposes strict requirements for reporting releases or threatened releases, thus enabling government to determine where a response is necessary. A central feature of CERCLA is the establishment of an evolving National Priorities List which lists, on the basis of reported information, sites of greatest concern.

Liability under CERCLA is expressly imposed on four classes of persons:

- the present owner or operator of the site;
- any past owner or operator who owned or operated the site at the time that the hazardous substance was deposited on the site;
- any person (generator) who arranged to have his own waste taken to site for disposal or treatment; and
- any person who transported the hazardous substance to the site, if that person selected the site.

The legislation is clearly retroactive. It is immaterial that pollution occurred in the absence of, or in compliance with, prohibitions. In fact, Congress viewed retroactive liability as essential for dealing with the widespread contamination which predated the introduction of environmental controls in the 1960s and 1970s.

CERCLA imposes 'absolute' liability -- that is, unlike 'strict' liability, a defence of due diligence does not avail. With a due diligence defence, defendants could escape liability if they prove that all reasonable steps were taken to prevent the occurrence (e.g., they used commonly-accepted technology to handle waste). U.S. legislators recognized that the 'due diligence' defence would often prevail, and thus significantly limit the contribution by polluting industries to the cleanup costs.

The courts have construed CERCLA to impose joint and several liability between those responsible under the Act. The result is that a party that contributed a minor portion of the hazardous substance may, under certain circumstances, be subject to liability for the entire clean-up costs. The courts have stated that the overriding purpose of CERCLA was to achieve clean-ups, and it was not the intent of the legislation to direct the conceptually difficult task of dissecting the respective (proportional) contributions of the many parties which may have some connection to the site.

CERCLA recognizes that in certain instances, the liable parties would not be able to fund the entire clean-up. To fully fund the clean-up bill, Congress instituted a tax on the chemical industry, past and present, to pay for the costs cleaning up inactive hazardous waste sites. A 'Superfund' was established to collect the tax.

It should be noted that CERCLA (and similar state legislation) provides some relief. Important sources of relief occur in the following circumstances:

- truly innocent property owners - this defence avails where the person, at the time of acquisition, "did not know and had no reason to know that any hazardous substance which is the subject of the release or threatened release was disposed of on, in, or at the facility," or where the person acquired it by inheritance or bequest; and

- 'de minimus' settlements - the government is able to 'cash out' de minimus (or minor) contributors as soon as possible in any settlement proceedings.

Most U.S. states have adopted CERCLA-type legislation to cover those sites which are not covered by the federal program. State legislation generally contains provisions very similar to CERCLA, notably the 'responsible persons' and absolute, joint, and several liability. Some states in fact go further than CERCLA. For example, New Jersey's Environmental Clean Up Responsibility Act requires that prior to the sale of industrial land or the closing of a business the vendor or owner of the business must assure the state's Department of Environmental Protection that there has been no release of a hazardous substance on the site. If contamination has occurred, an approved remediation program must be undertaken prior to the sale or closing of the business. Less onerous variations of the New Jersey models have been adopted in other states, including Washington and California, but have had the similar practical result of compelling detailed disclosures by vendors prior to a sale of property. This trend to vendor disclosure has significantly

altered the common law rule of 'buyer beware' in real estate transactions. Moreover, the spectre of CERCLA liability compels purchasers to insist on detailed vendor disclosures in order to preserve the 'innocent owner' defence.

2. Ontario's Approach

While Ontario's approach to contaminated land approximates B.C.'s it differs in several respects. For one, Ontario has adopted de-commissioning guidelines. ("Guidelines for the Decommissioning and Clean-up of Sites in Ontario") which apply to all provincially, municipally, and privately owned sites and facilities to be closed down at which environmental contamination may have taken place.

Where unwilling to meet the Ministry's decommissioning or site clean-up objectives or time frames, enforcement is achieved by rigorous application of broadly-worded order powers.

Part 9 of Ontario's Environmental Protection Act dramatically restructures the rules of liability and compensation in the context of "spills" (which, given the broad definition of "spills", could apply to releases from contaminated sites). In particular, absolute liability was imposed on owners and controllers of a spilled pollutant in respect of the costs and expenses incurred by the government and other persons. The more conventional strict liability (which imports the defence of due diligence) was imposed on owners and controllers for loss and damage incurred as a direct result of a spill.

Ontario's Gas Handling Act alters the common law rule of 'buyer-beware' by requiring a land owner, upon the sale or lease of property, disclose to a prospective purchaser or lessee the existence of underground storage tanks. The owner must also provide the purchaser or lessee with proof that the tanks are in compliance with certain provisions of the regulations promulgated under the Act.

3. Quebec's Approach

In 1988, the Province of Quebec announced a "Contaminated Sites Rehabilitation Policy" to deal with the problem of contaminated sites in the province. The policy is designed to allow the recovery of former industrial sites with a view to ensuring that the quality of the soil is compatible with the proposed use to which the land is put. A feature of this policy is that the Ministry of Environment relies on local government to identify contaminated sites and make referrals to provincial authorities.

4. The Netherlands' Approach

Under The Netherlands' Soil Protection Act, liability is based on ability to pay, not on the activities of the owner/operator unless the person has unfairly profited from such contamination. In these instances the various levels of government may be required to contribute to the costs of clean-up. The Act also requires provincial authorities to draw up a clean-up program to deal with soil contamination in consultation with municipalities each year. The plan identifies sites where there is soil contamination and outlines a remedial action plan.

APPENDIX 3: SELECTED REFERENCE MATERIAL

1. Books and Reports

Acton, J.P., Understanding Superfund. The Rand Corporation: Santa Monica, Calif., 1989.

Braul, W., J. Russell, and B. Andrews, Toxic Real Estate: Identification of Issues. West Coast Environmental Law Research Foundation: Vancouver, 1989.

Braul, W., Toxic Real Estate in British Columbia: Liability. West Coast Environmental Law Research Foundation: Vancouver, 1990.

City of Vancouver, Manager's Report, Jan. 12, 1990.

Epstein, S.L., L. Brown, and C. Pope, Hazardous Waste in America. San Francisco: Sierra Club Books, 1982.

Glenn, W., D. Shier, K. Sisson, and J. Willms, Toxic Real Estate Manual. Corpus Information Services: Toronto, 1989.

Huestis, L., et al, Contaminated Sites Management in the Province of British Columbia: A Review of Provincial Roles and Responsibilities, prepared for Ministry of Environment, Province of British Columbia, 1990.

Ministry of Environment, Contaminated Sites Rehabilitation Policy. Province of Quebec, 1988.

Ministry of Environment, Criteria for Managing Contaminated Sites in British Columbia (Draft). Province of British Columbia, 1990.

Russell, J., and B. Andrews, Toxic Real Estate in British Columbia: Draft Statute for Discussion. West Coast Environmental Law Research Foundation: Vancouver, 1990.

Toxic Real Estate. The Continuing Legal Education Society of British Columbia, 1990.

2. Statutes

Canadian Environmental Protection Act, S.C. 1988, c. 22.
Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), Pub. l. No. 96-510, Title 1, 101, 94 Stat. 2767 (1980) (codified as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), 42 U.S.C. 9601-9675 (1982 & Supp. V 1987)).

Environmental Protection Act, R.S.O. 1980, c. 141, (ONTARIO)

Environmental Clean Up Responsibility Act, New Jersey Statutes, Title 13, Ch. 1K.

Environment Management Act, S.B.C., 1980-1981, c. 14

Gas Handling Act, R.S.O., 1980, c. 185.

Hazardous Waste Cleanup - Model Toxics Control Act, RCW 70.105D, Washington.

Land Title Act, R.S.B.C., 1979, c. 279

Municipal Act, R.S.B.C. 1979, c. 290.

Special Waste Regulation, B.C. Reg. 63/88.

Waste Management Act, S.B.C. 1982, c.41.